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EXAMINER	
TAI, CYRIL	
ART UNIT	**PAPER NUMBER**
1723	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/679,330	**Applicant(s)** CHANG, CHIN- CHING	
	Examiner Cyril Tai	**Art Unit** 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-3 and 5-20* is/are rejected.
7)☒ Claim(s) *4* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *07 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a)☐ All b)☐ Some * c)☐ None of:
  1.☐ Certified copies of the priority documents have been received.
  2.☐ Certified copies of the priority documents have been received in Application No. _____.
  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Analysis

1. Claim 1 discloses a simple faucet water-filtering device comprising a main body and a connection section with intended use with a spout of a faucet. For examination purposes, this subcombination (main body and connection section alone) has been deemed to be recited.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 6, 8, 10, 12, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holm (US 2,198,819) in view of Kennison et al (US 2,465,021). Holm discloses a liquid filtering device comprising a main body (combination of the following) and a connection section (66), an upper cap (2) of the main body, a lower end (45) of the main body being formed with a fluid outlet (14), the liquid filtering device being characterized in that the main body including the upper cap, a casing (1), a flow-conducting screen cover (25), an energy cup (5) and a liquid discharging connector (3), a liquid filtering material (50) being contained in the energy cup for acting on the liquid flowing through the energy cup, whereby after filtered, the liquid flows through the spiral liquid way and then flows out from the liquid outlet of the bottom of the casing for serving a user (see Figs. 1, 4, 5 and 6). Holm differs from claim 1 in that it fails to teach an energy cup having an outer wall being formed with a spiral path, a casing defining therein a receiving space in which the energy cup is placed, whereby a spiral liquid way is defined between the outer wall of the energy cup and inner wall of the receiving space.

Kennison et al teaches an energy cup (25) having an outer wall (27) being formed with a spiral path (32), a casing (10) defining therein a receiving space (formed by upper portion 11) in which the energy cup is placed, whereby a spiral liquid way (30) is defined between the outer wall of the energy cup and inner wall of the receiving space (see Figs. 1, 4). Kennison et al and Holm are analogous art wherein both liquid filtering devices are intended for filtering liquid fuels. Holm claims a device for filtering liquids such as water.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Kennison et al to modify the energy cup having an outer wall being formed with a spiral path, a casing defining therein a receiving space in which the energy cup is placed, whereby a spiral liquid way is defined between the outer wall of the energy cup and inner wall of the receiving space in order to allow liquid to flow in two directions (see col. 1, lines 22-26, 33-38 of Kennison et al) versus one direction (see Fig. 1 of Holm).

Claim 6 adds the further limitation of the outer wall face of the upper end of the casing is formed with an outer thread, the upper cap being screwed on the outer thread of the upper end of the casing. Holm teaches an outer wall face (8) of the upper end of the casing is formed with outer thread, the upper cap being screwed on the outer thread of the upper end of the casing (see Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add an outer wall face of the upper end of the casing formed with an outer thread, with the upper cap being screwed on the outer thread of the upper end of the casing, to the main body of Holm in view of Kennison et al in order to secure the upper cap to the main body (see pg. 2, lines 34-41 of Holm).

Claim 8 adds the further limitation of a liquid discharging connector screwed with a liquid outlet of a bottom of a casing. Holm teaches a liquid discharging connector (3) screwed with a liquid outlet of a bottom of a casing (see Figs. 4 and 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add a liquid discharging connector screwed with a liquid outlet of a bottom of a casing to the main body of Holm in view of Kennison et al in order to allow attachment of a nozzle or a continuous conduit (see pg. 2, lines 54-59 of Holm).

Claim 10 adds the further limitation of a flow-conducting screen cover overlaid on the upper opening of an energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices. Holm teaches a flow-conducting screen cover (25) overlaid on the upper opening (7) of an energy cup (5), a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section (26), a circumference of the flow-conducting screen cover being formed with multiple orifices (30) (see Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to modify the flow-conducting screen cover of Holm in view of Kennison et al such that it is overlaid on the upper opening of the energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices, in order to receive liquid flow from a conduit and to produce a nozzle-like effect on the liquid flow (see pg. 2, lines 11-22 of Holm).

Claim 12 adds the further limitation of a flow-conducting screen cover overlaid on the upper opening of an energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices. Holm teaches a flow-conducting screen cover (25) overlaid on the upper opening (7) of an energy cup (5), a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section (26), a circumference of the flow-conducting screen cover being formed with multiple orifices (30) (see Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to modify the flow-conducting screen cover of Holm in view of Kennison et al such that it is overlaid on the upper opening of the energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices, in order to receive liquid flow from a conduit and to produce a nozzle-like effect on the liquid flow (see pg. 2, lines 11-22 of Holm).

Claim 14 adds the further limitation of a conduction section of a flow-conducting screen cover is formed with slits. Holm teaches a conducting section (28) of a flow-conducting screen cover (25) that is formed with slits (27) (see Figs. 2 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add slits to the conducting section of the flow-conducting screen cover of Holm in view of Kennison et al in order to conduct liquid flow into spiral paths formed by a plurality of slits to impart a centrifugal current and directional flow to the liquid (see pg. 2, lines 11-22 of Holm).

Claim 17 adds the further limitation of a conduction section of a flow-conducting screen cover is formed with slits. Holm teaches a conducting section (28) of a flow-conducting screen cover (25) that is formed with slits (27) (see Figs. 2 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add slits to the conducting section of the flow-conducting screen cover of Holm in view of Kennison et al in order to conduct liquid flow into spiral paths formed by a plurality of slits to impart a centrifugal current and directional flow to the liquid (see pg. 2, lines 11-22 of Holm).

6. Claims 2, 3, 7, 9, 11, 13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holm ('819) and Kennison et al ('021) as applied to claim 1 above, and further in view of Ellis et al (US 3,895,832).

Claim 2 adds the further limitation of a connecting section. Ellis et al teaches a connecting section that includes a faucet locking collar (16), an inner locking collar (22), an inner bushing (14), and a two-way connector (12), the faucet locking collar defining a through hollow cavity (see Figs. 3, 4), an upper end of the faucet locking collar being formed with an inner conic opening (see Figs. 3 and 4), a wall of the cavity being formed with an inner thread (62) below the inner conic opening, the inner locking collar defining a cavity, an outer face of the inner locking collar being formed with an outer thread (30), an upper end of the inner locking collar being formed with a conic section adapted to the inner conic opening of the faucet locking collar (see Figs. 3 and 4), the inner bushing being placed in the cavity of the inner locking collar (see Figs. 3 and 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Ellis et al to add a connecting section that includes a faucet locking collar, an inner locking collar, an inner bushing, and a two-way connector to the liquid filtering device of Holm and Kennison et al in view of Ellis et al in order to adapt the main body to a spout of a faucet lacking threads (see col. 1, lines 3-10 of Ellis).

Claim 3 adds the further limitation of extensible splits of the conic section of the inner locking collar. Ellis et al teaches extensible splits (34) (see col. 5, lines 59-65) on the conic section of an inner locking collar (20) (see Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Ellis et al to add extensible splits to the conic section of Holm and Kennison et al in view of Ellis et al in order to form a tight seal around a spout of a faucet (see col. 1, lines 10-15 of Ellis).

Claim 7 adds the further limitation of the outer wall face of the upper end of the casing is formed with an outer thread, the upper cap being screwed on the outer thread of the upper end of the casing. Holm teaches an outer wall face (8) of the upper end of the casing is formed with outer thread, the upper cap being screwed on the outer thread of the upper end of the casing (see Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add an outer wall face of the upper end of the casing formed with an outer thread, with the upper cap being screwed on the outer thread of the upper end of the casing, to the main body of Holm and Kennison et al in view of Ellis et al in order to secure the upper cap to the main body (see pg. 2, lines 34-41 of Holm).

Claim 9 adds the further limitation of a liquid discharging connector screwed with a liquid outlet of a bottom of a casing. Holm teaches a liquid discharging connector (3) screwed with a liquid outlet of a bottom of a casing (see Figs. 4 and 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add a liquid discharging connector screwed with a liquid outlet of a bottom of a casing to the main body of Holm and Kennison et al in view of Ellis et al in order to allow attachment of a nozzle or a continuous conduit (see pg. 2, lines 54-59 of Holm).

Claim 11 adds the further limitation of a flow-conducting screen cover overlaid on the upper opening of an energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices. Holm teaches a flow-conducting screen cover (25) overlaid on the upper opening (7) of an energy cup (5), a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section (26), a circumference of the flow-conducting screen cover being formed with multiple orifices (30) (see Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to modify the flow-conducting screen cover of Holm and Kennison et al in view of Ellis et al such that it is overlaid on the upper opening of the energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices, in order to receive liquid flow from a conduit and to produce a nozzle-like effect on the liquid flow (see pg. 2, lines 11-22 of Holm).

Claim 13 adds the further limitation of a flow-conducting screen cover overlaid on the upper opening of an energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices. Holm teaches a flow-conducting screen cover (25) overlaid on the upper opening (7) of an energy cup (5), a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section (26), a circumference of the flow-conducting screen cover being formed with multiple orifices (30) (see Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to modify the flow-conducting screen cover of Holm and Kennison et al in view of Ellis et al such that it is overlaid on the upper opening of the energy cup, a center of the flow-conducting screen cover being formed with a funnel-shaped conducting section, a circumference of the flow-conducting screen cover being formed with multiple orifices, in order to receive liquid flow from a conduit and to produce a nozzle-like effect on the liquid flow (see pg. 2, lines 11-22 of Holm).

Claim 16 adds the further limitation of a conduction section of a flow-conducting screen cover is formed with slits. Holm teaches a conducting section (28) of a flow-conducting screen cover (25) that is formed with slits (27) (see Figs. 2 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add slits to the conducting section of the flow-conducting screen cover of Holm and Kennison et al in view of Ellis et al in order to conduct liquid flow into spiral paths formed by a plurality of slits to impart a centrifugal current and directional flow to the liquid (see pg. 2, lines 11-22 of Holm).

Claim 18 adds the further limitation of a conduction section of a flow-conducting screen cover is formed with slits. Holm teaches a conducting section (28) of a flow-conducting screen cover (25) that is formed with slits (27) (see Figs. 2 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holm to add slits to the conducting section of the flow-conducting screen cover of Holm and Kennison et al in view of Ellis et al in order to conduct liquid flow into spiral paths formed by a plurality of slits to impart a centrifugal current and directional flow to the liquid (see pg. 2, lines 11-22 of Holm).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holm ('819) and Kennison et al ('021) as applied to claim 1 above, and further in view of Jennison (US 9,760).

Claim 5 adds the further limitation of a connection section that is a movable faucet, an upper end of the movable faucet being formed with an inner thread or outer thread for screwing on a faucet. Jennison teaches a connection section (f) that is a movable faucet, an upper end of the movable faucet being formed with an inner thread or outer thread for screwing on a faucet (see Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Jennison to add a connection section that is a movable faucet, an upper end of the movable faucet being formed with an inner thread or outer thread for screwing on a faucet, to the liquid filtering device of Holm in view of Kennison et al in order to attach the liquid filtering device to the threaded spout of a faucet (see page 1, lines 60-61 of Jennison et al).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holm ('819), Kennison et al ('021) and Nieweg ('272) as applied to claim 14 above, and further in view of Baume (US 2,491,796).

Claim 15 adds the further limitation of a conduction section formed with reinforcing ribs and adjoining face adjacent to the slits of the conducting section. Baume teaches a conduction section (5) formed with reinforcing ribs (9) (see col. 1, lines 9-14; col. 2, lines 21-28; Figs. 2, 3 and 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Baume et al to add reinforcing ribs to the conducting section of the flow-conducting screen cover of Holm in view of Kennison et al in order to withstand the force and pressure of liquid passing through the conducting section of the flow-screen conducting cover (see col 1., lines 9-13 and col. 2, lines 23-28 of Baume).

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holm ('819) and Kennison et al ('021) as applied to claim 1 above, and further in view of Farley (US 5,914,043).

Claim 19 adds the further limitation of a water-filtering material that is calcium sulfite. Farley teaches that calcium sulfite has been used as a water-filtering material (see col. 4, lines 24-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Farley to use calcium sulfite as a water-filtering material of Holm in view of Kennison et al in order to treat chlorine in tap water (see col. 4, lines 24-26 of Farley).

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holm ('819), Kennison et al ('021) and Ellis et al ('832) as applied to claim 2 above, and further in view of Farley ('043).

Claim 20 adds the further limitation of a water-filtering material that is calcium sulfite. Farley teaches that calcium sulfite has been used as a water-filtering material (see col. 4, lines 24-26).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Farley to use calcium sulfite as a water-filtering material Holm and Kennison et al in view of Ellis et al in order to treat chlorine in tap water (see col. 4, lines 24-26 of Farley).

Allowable Subject Matter

15. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cyril Tai whose telephone number is (571) 272-1495. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cyril Tai
Examiner
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